

An ADS-B derived ATC linked ER System for NextGen Safety, Phase II

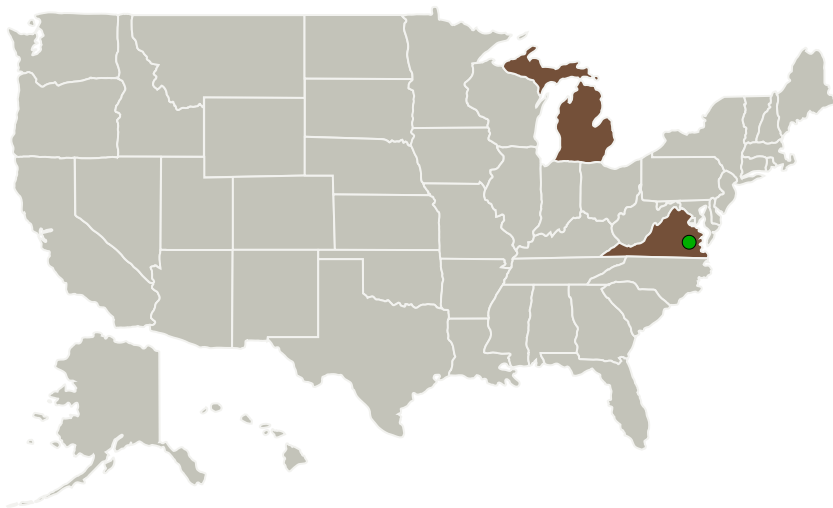


Completed Technology Project (2013 - 2015)

Project Introduction

The Phase I verified ADS-B-ER feasibility-based on compatibility with the ADS-B operational standards and design specs, bandwidth and the iPad EFB capability for performing the trajectory computations for avoiding hazardous weather, terrain, traffic and restricted airspace. We then assured that the -ER software can interface these waypoints to large variety of existing GA analog and digital auto pilots (approximately 100,000 GA airplanes are equipped with autopilots). The Phase I work demonstrated feasibility by carefully evaluating candidate hardware options. The overall target is a decisive enabler for GA NextGen ops as well as for improved levels of GA safety.

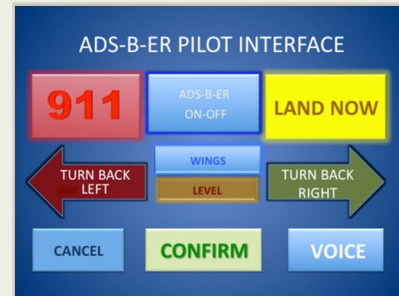
Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Munro and Associates	Lead Organization	Industry	Troy, Michigan
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia

Primary U.S. Work Locations

Michigan	Virginia
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Project Transitions

 **July 2013:** Project Start

 **July 2015:** Closed out

Images



Project Image

An ADS-B derived ATC linked ER System for NextGen Safety
(<https://techport.nasa.gov/image/125771>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Munro and Associates

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

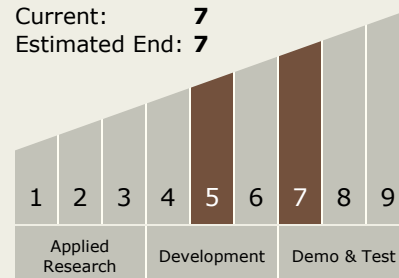
Carlos Torrez

Principal Investigator:

Richard E Weiss

Technology Maturity (TRL)

Start: 5
Current: 7
Estimated End: 7



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Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
 - └ TX16.4 Architectures and Infrastructure

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System